REPORT RESUMES

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ON THEIR OWN, A HANDBOOK OF INDEPENDENT STUDY.

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ABINGTON TOWNSHIP SCHOOL DISTRICT, PA.

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THE RESPONSES OF 741 NINTH-GRADE STUDENTS TO THE INDEPENDENT STUDY PROGRAM (ISP) WERE RECORDED FROM HOMEROOM DISCUSSIONS AND THE INDEPENDENT STUDY QUESTIONNAIRE (ISQ). THE ISP PROVIDED TIME BLOCKS, SPECIAL FACILITIES, AND MINIMAL RULES AND REGULATIONS FOR A HIGH SCHOOL STUDENT'S DAY. BASIC CONTENT COURSES (DEPARTMENTAL CENTERS) AND SKILL IMPROVEMENT AREAS (INDEPENDENT STUDY CENTERS) WERE ORGANIZED WITH STRUCTURED AND UNSTRUCTURED LEARNING EXPERIENCES, USING TEACHERS, AIDES, AND STUDENT LEADERS. THE PRINCIPAL SELECTED AND TRAINED A STUDENT DISCUSSION LEADER FOR EACH HOMEROOM. A STUDENT RECORDED SUMMARIZED STUDENT RESPONSES TO EACH DISCUSSION QUESTION AND SUBMITTED A RESUME TO THE PRINCIPAL. THE SUMMARY COMPILED FROM THE RESUMES LISTED (1) THE DISCUSSION QUESTIONS, (2) A CONSENSUS OF STUDENT RESPONSES, AND (3) A SAMPLE OF THE MOST INTERESTING RESPONSES. RESPONSES WERE TABULATED BY (1) FAILURE NOTICES, (2) PERIODS SPENT IN DEPARTMENT CENTERS AND ISP CENTERS, (3) MATERIALS AND EQUIPMENT USED, (4) TYPE OF ISP, AND (5) WEEKLY ATTENDANCE IN EACH CENTER. RECOMMENDATIONS INCLUDED (1) GREATER USE OF THE ISP FOR BASIC COURSE CONTENT, (2) MORE MATERIALS AND EQUIPMENT FOR ISP CENTERS, (3) MORE SPACE FOR ISP CENTERS, AND (4) THE ADDITION OF A FULL-TIME ISP PROGRAM COORDINATOR. THE APPENDIX INCLUDED (1) FORM LETTERS TO STUDENTS AND PARENTS EXPLAINING THE ISP AND SCHEDULING PROCEDURES, (2) STUDENT AND TEACHER ISP GUIDES, (3) TEACHER REPORTING FORMS FOR ISP AND (4) THE ISQ. (JB)

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A HANDBOOK OF INDEPENDENT STUDY

Abington High School, North Campus
Abington, Pennsylvania

EA 000 242

ON THEIR OWN

A HANDBOOK OF INDEPENDENT STUDY

ABINGTON HIGH SCHOOL

NORTH CAMPUS

Abington, Pennsylvania

1966

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Mr. Frank Wilgocki, Foreign Languages

The entire faculty of Abington High School North Campus have been most instrumental in the success of the program. Their untiring efforts to make independent study a vital part of education at North Campus speak eloquently of their dedication to their profession and of their commitment to their pupils.

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THE SETTING: COMMUNITY, STUDENT BODY, AND SCHOOL

In order to understand fully the nature of our independent study, it might be helpful to sketch in a few of the characteristics of the community, the student body, and the school, so that the reader can understand the context within which this program operates.

1. The community. The Abington School District embraces the township of Abington and the borough of Rockledge. While predominantly a middle-class residential suburb (northeast of Philadelphia, Pennsylvania), it is a heterogeneous community in every respect. The economic status of its residents ranges from poor to wealthy; it is mixed racially and religiously; it has some industry, many shopping centers, and a complete range of residential housing.

2. The student body. The student body reflects the heterogeneity of the community. While the median IQ is about 112, the range is from 50 to 170. Although approximately 70% will go on to some form of higher education, the students represent a complete range of ability and aspirations.

3. The school. This is a school which includes only the first two years of high school, grades 9 and 10. Our students come to us from the three junior high schools for grades 7 and 8 in the district, and from a number of parochial elementary schools. When our students finish grade 10, they go on to the Abington High School South Campus for grades 11 and 12. Our North Campus school is housed in a new building (opened in September, 1964). In addition to our independent study program, extensive use is made of other educational innovations:

    a. Large-group instruction
    b. Small-group seminars
    c. Team teaching
    d. A flexible or modular schedule
    e. School-within-a-school
    f. Modern curricula in all major subject areas

OVERVIEW OF INDEPENDENT STUDY

Since the term "independent study" is a broad term, subject to many interpretations and used to identify many different kinds of approaches, it might be wise to begin with a definition of independent study as it operates at North Campus:

> Independent study is a program which provides
>
> for all students
>
> the necessary time
>
> facilities
>
> materials and equipment
>
> to accomplish several short-term objectives
>
> and long-range goals
>
> by working and studying independently
>
> with the direction and assistance of
>
> professional, para-professional,
>
> and student personnel
>
> in structured and unstructured learning situations
>
> with a minimum of rules and regulations

Let us look at each of these key underlined elements briefly and then throughout this booklet examine each in greater detail.

1. For all students. One of the basic principles of our program is that all students in the school can benefit from independent study. We still see this as a goal to strive for. At the present time, however, we find that about 2% of the students (perhaps 40 in number) have not demonstrated the necessary self-discipline; they are, consequently, assigned to a restricted, supervised study room during their independent study modules.

2. Time. Our school operates on a 17-module day, with 23 minutes for each module. Out of this 85-module week, the student will be scheduled in the following way:

Lunch:	5 modules
Scheduled classes:	50-65 modules
Independent study:	15-30 modules

3. Facilities. All of the school's facilities are open to the students, with certain limitations which are spelled out more fully in the following pages. A complete list of the facilities can be found in the section on facilities.

4. Materials and equipment. The independent learning centers throughout the building are equipped with a broad variety of multi-sensory learning aids: texts, magazines, programed materials, 8mm projectors, tape recorders, filmstrips and projectors, recordings and players, learning games, models, maps, etc.

5. Short-term objectives. We believe that independent study has various important immediate benefits for the student. It enables him to:

   Develop present interests in depth

   Explore new interests

   Master basic course content at his own pace

   Learn advanced course content

   Do regularly assigned "homework"

   Practice specific learning skills

   Get remedial help

   Have some relaxation from classroom pressures

   Engage in research

   Share in planning his daily schedule

   Catch up on class work missed due to absence

   Pursue individual or small-group projects in depth

   Help others in areas of special competence

6. Long-range goals. There are other goals, not always apparent to the student, yet quite important to the program. Through independent study we strive to:

   Make maximum use of staff and facilities

   Individualize the learning process

   Develop self-discipline, self-reliance, and self-responsibility

   Encourage students to plan and use time wisely

   Foster the development of skills in studying independently

   Inspire individual pursuit of learning

7. Professional, para-professional, and student personnel. Various supervisory patterns are in effect. In some instances student tutors are used to provide help. In the English center, a lay reader is used. In most of the centers, teachers are on hand to provide assistance. In some centers, students are completely on their own and provide their own supervision.

8. Structured and unstructured learning situations. In its basic concept, independent study is unstructured. Every day and every period are different: the student decides where he can work most effectively and what he can most profitably do. He merely reports at once to the center he has selected; there is no need to make reservations, draw up a schedule, or make long-range plans. We know that the adolescent is impulsive by nature and that the school must be organized so as to capitalize upon his impulse to learn. Within this broad unstructured framework, however, independent study activities reflect varying degrees of structure. Many are totally unstructured, where the student is left completely on his own to work as he sees fit. Many have a modicum of structure suggested or developed by the teacher through work sheets, assigned problems, delineated projects. Others are highly structured and become almost indistinguishable from a class in terms of the kinds of learning activities that go on.

9. Rules and regulations. We believe that independent study can best operate with a minimum of rules and regulations. No passes are used, and no attendance is checked (with certain exceptions which will be noted later). However, certain clear and specific regulations are set up and strictly enforced in order to ensure the orderly conduct of class instruction and to hold at a high level general discipline within the school.

ORIENTATION TO INDEPENDENT STUDY

Each year an extensive orientation to independent study is carried out with students and parents. Briefly, this works as follows:

1. January. Group meetings are held with students on course selections. The purposes and uses of independent study are discussed.
2. January. Group meetings in the evening are held with parents on course selection. At this time independent study is explained.
3. February, March, April. As indicated previously, the counselor reviews with the student and the parents in individual conference how much independent study time will be available and discusses briefly the purposes and uses of independent study. (See exhibit 1.)
4. August. During the summer a school newsletter is sent to each home with various kinds of information, including a reminder about independent study. (See exhibit 2.)
5. September. Large-group orientation sessions are held for each house (comprising ten adviser rooms) on the first day of school, at which time independent study is discussed.
6. September. Time is provided for each adviser to discuss independent study with his adviser room students. The student works out a proposed schedule for the week to come; he is not required to adhere to this, but it is intended to help him see how he can best use his time. He reviews this with his parents. (See exhibit 3.)
7. September. Each classroom teacher reviews with his students how independent study time should be used for that subject.
8. September. While this orientation is going on in house meetings, adviser rooms, and subject classrooms during the first two weeks of school, the student uses his independent study time in the library or in the large "commons" study centers. The other independent study centers are not open until the faculty feels that procedures have been clarified, students have gotten acquainted with the building, and sufficient classroom instruction has taken place to warrant use of the centers. Normally, this orientation stage lasts two weeks.
9. September (2nd week). An early faculty meeting is devoted to independent study. In addition, each department holds special departmental meetings on independent study.

10. October. During the school's "Back-to-School" night for parents, a special program on independent study is presented to large groups of parents. In addition, the classroom teacher discusses with the parents in attendance how he expects independent study to be used. Equipment is displayed; also, schedules of centers are available.

11. October-November-December. The principal holds a series of meetings for new teachers to orient them to independent study and help them see how they can contribute to it.

12. November. At the end of the first report period, all classroom teachers re-emphasize independent study and make a special attempt to reach the non-achiever. Failure notices that are sent home carry a reminder about independent study. (See exhibit 4.)

13. November-December. The principal meets with small groups of students to exchange ideas on independent study in order to appraise, evaluate, and improve the operation of this program.

14. December. A special evening meeting for parents is devoted to independent study. At this time student projects are on display and individual students report on how they use their time. (See exhibit 5.)

15. January. Mid-year time marks another attempt to inform and orient. New independent study opportunities are introduced, and the failing student is strongly encouraged to structure and use his time more profitably.

16. January. Students who seem ready to undertake a major project during second semester are brought together for a group discussion of major work projects. (See exhibit 6.)

17. May. The school holds an annual "Festival of the Arts," which, among other things, provides an opportunity for the display and recognition of individual achievement through independent study. Students are encouraged to make plans for the year to come.

HOW INDEPENDENT STUDY IS SCHEDULED

In a certain sense, independent study is what is left over when the rest of the student's schedule has been completed. Briefly, the process is as follows:

1. In February, March, and April, the counselor talks with the student and parents about course selection for the following year. The counselor has been informed about the number of total modules available for the following year, and the number of modules for each subject. In general, the counselor operates on the following assumptions and restrictions:

    a. All students must take English, science, World Civilizations, mathematics, and physical education.
    b. Almost all students should take another subject which has the time equivalent of a "major" subject (band, orchestra, foreign language, industrial arts, Art I, home economics).
    c. All students must enroll for subjects which will give them at least a minimum total of 45 points credit (roughly the equivalent of 4½ Carnegie units).
    d. No student should have less than 15% of his time available for independent study, unless there are very compelling reasons for making an exception.
    e. The student who lacks the maturity and initiative to work independently should have a higher proportion of scheduled class time. (Note that maturity and initiative are not synonymous with academic ability.)

    The counselor makes clear to the student and the parent how much independent study time will be available.

2. When the student has been scheduled for all his courses (both key-sort and computer schedules have been used), the remaining modules of unscheduled time are identified as Independent Study. The counselor will review each schedule to check whether there is a drastic imbalance in the way independent study modules have fallen. In general, if the student has more than five consecutive independent study modules, the counselor will attempt to reschedule some classes in order to get a better balance.

3. The amount of time available for independent study is thus a product of individual counseling, school subject requirements, and the amount of scheduled class time for each subject. Yet this amount of time is not only "that which is left over"; it is very much a product of the school's philosophy about how much time should be allotted to independent study. While some schools seem to operate successful independent study programs that take up as much as 50% of the student's time, we feel that from 25-30% is optimum for our students for the following reasons:

   a. They are 14 and 15 years of age and have not reached full maturity in most aspects of their development.
   b. Students have had almost no independent study experience prior to the time they enter our school.
   c. Our independent study program is only in its second year of operation, and many of the faculty still see a need for more scheduled class time.
   d. As best we can gauge community sentiment, there are still strong feelings favoring a high percentage of scheduled class time.

STUDENT ELIGIBILITY FOR INDEPENDENT STUDY

We believe that all students should have the opportunity for independent study--until they show they are not ready for it. Simply, the procedure operates as follows:

1. When the school year begins, all students have the freedom of independent study.

2. Within two or three weeks after the opening of school, the Assistant Principal for Student Discipline establishes a list of about 8-10 students (½% of the student body) who have already been reported for a series of infractions of school independent study regulations. (The most common: smoking in lavatories, talking in quiet study areas, misusing study materials, disrespect for supervisory personnel.) These students are assigned to the Restricted Study Room, and a list of their names is circulated to the faculty.

3. These restricted students must report to the Restricted Study Room whenever they are not assigned to a class. They must bring work with them and work quietly. A teacher is on duty to check roll and enforce quiet study.

4. Every two weeks thereafter this list of restricted students is reviewed by the assistant principal. If there is evidence that the student's behavior and attitude have improved, he is returned to full privileges of independent study. If there has not been sufficient improvement, he continues on restricted study. New names are added as necessary.

5. If a classroom teacher wishes to give remedial help to a student on restricted study, he merely sends a note to the assistant principal, specifying when he wishes to work with the student, and the necessary arrangements are made.

6. During the course of the year, the number of students so restricted averages about 2%. It has reached a maximum of 3%. Most of those restricted are in 9th grade, and there are more boys than girls.

7. During the course of the school year, there will be a "hard core" of about ½% of the student body who will continue to be assigned to restricted study week after week. Most of the students who are so restricted will average from two to four periods of restriction (four to eight weeks) during the school year.

8. Finally a small group of students are restricted for academic reasons. After mid-year grades have been analyzed, the assistant principal and the guidance counselors identify a small group of students who have failed three or more academic subjects and who seem to show inability to use time profitably. These students must report to the Restricted Study Area unless teachers, counselors, or parents ask that they be released.

FACILITIES FOR INDEPENDENT STUDY

The North Campus school is housed in a modern building (opened September, 1964), especially designed to facilitate independent study. The following areas are available for student use in independent study:

1. Library. The air-conditioned library has an area of 10,000 square feet, with many special rooms and facilities: electronic carrels (connected by cable to the language laboratory and equipped with telephone dials that permit the student to dial any one of 160 programs); study carrels; typing room; audio-visual room; periodical room; reference area; browsing area. In addition to an excellent collection of books and periodicals, the library also houses a fine collection of recordings, tapes, and filmstrips.

2. Seminar rooms. Twenty seminar rooms are available for independent study. The rooms are about 12' x 24' in size, equipped with tables, chairs, and easel; students use them chiefly for teacher conferences, lay reader conferences, planning sessions with fellow students.

3. Large-group rooms. These two 150-seat lecture halls are used exclusively for large-group presentations; students may attend any large-group presentation just by checking with the teacher in charge.

4. Little Theater. The theater is available for use in independent study for dramatics, speech, or music practice. It has a large stage, dressing rooms, projection room, and seats for 350.

5. Vocal music practice rooms. These small practice areas adjoin the choral room and are available for individual or small-group practice. The choral room is also available for individual and group rehearsals.

6. Instrumental practice rooms. These rooms adjoin the band-orchestra room and are used by individuals and small groups practicing musical instruments. The large instrumental room is also available. Students may use a tape-recorder for self-evaluation.

7. Student lounge. This room has been equipped, furnished, and decorated by the Student Council and is available for use by those students who qualify and can produce the necessary lounge pass.

8. Gymnasia. Several specialized gymnasia are available for directed use with proper faculty supervision:

    a. Remedial-wrestling gym. Specially padded, matted, and equipped for these two activities.
    b. Apparatus gym. This gymnasium has trampoline, rings, horses, parallel bars permanently set up for class and independent use.
    c. Girls dance gym. Limited for use by those interested in modern dance.

d. Regular gymnasia. Three regular gymnasia are available for group games.

9. Industrial arts shops. Three industrial arts shops carry on specialized shop activities as follows:

    a. Wood-plastics shop
    b. Graphic arts - mechanical drawing shop
    c. Power mechanics - metal working shop

10. Art suite. The art suite comprises three different areas suitable for independent study:

    a. Art laboratory: for painting and sketching
    b. Art craft room: sculpture, ceramics, art metal, art jewelry
    c. Art court: for outdoor painting and sketching

11. Commons A. A spacious area, seating 200, where students may sit at tables and converse with friends.

12. Commons B and Commons C: Two large commons (also seating 200 each) where students may study quietly at tables.

13. Guidance suite. The guidance suite includes the six counselors' offices, a conference room for small-group conferences, testing, and for viewing guidance films and filmstrips, and a college-and-career information center. (The latter includes open hanging vertical files and file cabinets, a catalog bookcase, and a small room containing several listening-viewing stations for a tape recorder and a filmstrip record player.)

14. Health suite. Student health conferences and examinations are held in the health suite during independent study.

15. Photography dark room. A well-equipped photographic dark room is used by students interested in photography.

16. Animal room. Small laboratory animals (mice, hamsters and gerbils, guinea pigs, rats) are housed here and are used by students for nutrition and genetics projects in independent study.

17. Greenhouse. The greenhouse and its facilities are available for students interested in horticulture and floriculture.

18. Science laboratories. All laboratories are available for directed student use. Three types are available: chemistry, biology, earth-space sciences.

19. Typing rooms. Two typing rooms, each equipped with 35 typewriters, are available for practice and the typing of reports and papers.

20. Home economics suite. The entire home economics suite is used for independent study. It includes the following specialized areas: foods laboratory, dining room, sewing laboratory, living room, dressing room.

21. Paperback book store. A large selection of paperback books is available for student purchase during independent study.

22. English Center. This is a specially equipped study center focusing on composition, grammar, and literature. Students can work on programed grammar, consult with a composition specialist, view filmstrips, listen to recordings of drama and poetry, read magazines, use reference books and educational-vocational planning materials.

23. Social Studies Center. This center is especially equipped to facilitate independent work in the social studies. It is equipped with filmstrip viewers, record players, tape recorders, 8mm automatic projectors, maps, globes, magazines, reference books, recordings, learning games, foreign periodicals, and educational-vocational planning materials.

24. Mathematics seminar rooms. These seminar rooms are scheduled for remedial clinic sessions.

25. Mathematics project room. A special mathematics seminar room is equipped with mathematical models, reference books, journals, games, and learning aids.

26. Advanced French Seminar room. A seminar room reserved for third-year French students who wish to do advanced work on literature, speaking, and composition, has recordings, newspapers, magazines, paperback books, and reference material in French.

27. Advanced Spanish Clinic. This is a special language seminar room reserved for second and third year Spanish students working on advanced literature projects.

28. Language Laboratories. These are two 36-station laboratories. A total of 24 stations are equipped with telephone dials which permit the student to dial independently any one of 160 different language programs. Other stations, controlled by a master console, permit the student to listen, to respond, to record, and to be monitored.

29. Reading Centers. These are two reading rooms, equipped with special mechanical reading aids, tape recorders, individualized reading units, reading books, and magazines. Any student wishing help in reading can use these centers.

MATERIALS AND EQUIPMENT FOR INDEPENDENT STUDY

If independent study is to be truly effective, the study centers must be fully equipped with learning aids and materials that will facilitate and encourage exploration, discovery, and mastery. Such aids at their best will be multi-sensory in nature, if they are to be most effective. The furnishing, supplying, and equipping of study centers is always an on-going process; materials wear out, are lost, and become outdated. And the more successful the center, the greater will be the demand for new materials.

All classrooms are furnished and equipped with the materials and equipment required for basic instruction. The list below is an attempt to call attention to special items and where they can be found.

Key: M-mathematics centers; F-foreign language; SS-social studies; E-English; L-library; H-home economics; SC-science; R-reading; B-business; I-industrial arts; Mu-music; G-Guidance.

Materials

Transparencies: M, SC
Paperback books: L, F, SS, E, M, SC, R, G
Reference books: L, F, SS, E, M, H, SC, R, I, G
Newspapers: L, F, SS, R
Magazines: L, F, SS, E, M, B, H, SC, R, I, G
Recordings:(disc): L, F, SS, E, Mu, G
Filmstrips: L, SS, E, B, H, SC, R, I, G
Slides: L, SS, SC, G
Slide-recordings programs: L, SS, G
Pre-recorded tapes: L, SS, E, SC, R, Mu, G
Workbooks and worksheets: F, SS, M, R, I, G
Programed texts: F, E, M, SC, R
Learning Games: E, M, R
Models: SS, E, L, M, SC, I
Individualized learning kits ("laboratories"): E, SC, R, G
8mm single concept cartridges: SS, H, SC, I

Equipment

8mm cartridge projectors: I, SS, H, SC
Tape recorders: MU, SS, L, E, R, F, G
Record players: F, SS, E, L, Mu, G
Filmstrip viewers: L, SS, E, H, SC, G
Filmstrip projectors: L, SS, E, B, H, SC, R, I
Overhead projectors: M, SC, E, SS
Slide projectors: L, SS, SC
Reading accelerators and pacing devices: R
Study carrels: L, SS, E, R
Cyclo teaching machines: E, R

INDEPENDENT STUDY - HOW MUCH STRUCTURE?

There is no single pattern or degree of structure in our independent study program. Both the nature and degree of structure will vary with the subject, the teacher, and the pupil. The following patterns, however, are typical:

1. Independent study is a required part of the instructional program. In certain subjects, independent study is required; the independent study time is carefully checked and the time is counted towards the Carnegie unit requirement. Such a requirement is considered a permanent part of the course structure; it is found in the following subjects:

    a. English - for programed learning of grammar
    b. Foreign language - for practice in the language laboratory
    c. Reading - for individual help in the reading center

2. Independent study is *assigned on an ad hoc* basis. From time to time a teacher in any subject may *require* that a student spend a certain number of periods in a specified learning center.

    For the first two types, the student receives credit for attendance by filling out a simple form which he first presents to the student, aide, or teacher on duty in the center for signature; the student then presents this signed attendance-credit slip to the classroom teacher. (See exhibit 7)

3. The guidance counselor, the adviser, or the subject teacher may *suggest* that the student spend certain portions of his time in certain centers. Such a suggested structuring of time may also result from parental request.

4. The student is left completely free to make his own decisions about place and type of study.

    For any given week, a typical breakdown of the kinds of structure found for a single student would be something like the following:

Total modules of independent study	23
Required as part of instruction	5
Assigned on an ad hoc basis	4
Completely unstructured	14

INDEPENDENT STUDY AND REMEDIAL HELP

One of the prime benefits of independent study is that it enables the teacher and the student to get together on an individual basis or in small groups for remedial help. Because of its basically unstructured nature, independent study provides the most flexible kind of remedial help; if in September, the student needs help in mathematics, he arranges for that; if in October, he needs less help in mathematics but more in language, he makes the necessary changes in his independent study program. Thus, he is not the "captive" of any given subject or any given teacher for a specified length of time.

There are two basic types of remedial help provided. In the first type, a teacher is assigned to staff a subject-centered study clinic. This assignment is made as part of the teacher's total schedule and he is on duty in the center from the opening of school. A teacher thus assigned will work with any students who report to the center; although, in the normal course of events, a few of these may be his own students, for the most part he will be working with students whom he does not have in class. Students report for this kind of remedial help only when needed. This type of remedial help is provided in the following areas:

1. Reading Center
2. Mathematics Clinic
3. English Center
4. Social Studies Center
5. Remedial Physical Education Gymnasium

A special example of this first type worthy of separate mention is the English Composition Clinic. During two mornings of the week the English Center is reserved for those who need help with composition...a lay reader is on duty to work with all those who report for assistance.

It might also be noted that all World Civilizations large-group lectures are taped and these tapes are made available in the library listening rooms for those who were absent from the lecture or who wish to review.

The second type of remedial help enables a teacher to work with his own students. It operates simply this way:

1. After sufficient time has elapsed for the teacher to establish which students need additional help, he announces when he is available to give remedial help.

2. Students interested in receiving additional help check their schedules to see which of their independent study periods match their teacher's unassigned periods. They fill out a form which gives the teacher this information.

3. After he has received all such requests, the teacher determines which periods would permit him to set up a remedial clinic which would reach at least four of his students.

4. The teacher then informs the assistant principal and the director of independent study when he is forming a remedial clinic; the assistant principal in turn attempts to release him from other supervisory duties in order to compensate him for his additional clinic time. (See exhibit 8)

5. Once a student has signed up for a remedial clinic with his classroom teacher, he is expected to attend on a regular basis until his teacher releases him.

6. If a student finds that he does not have any independent study time which matches his teacher's unassigned time, he may request assignment to a clinic operated on a regular basis by another teacher in that department. Usually his guidance counselor will arrange this.

Remedial clinics of this second type are operating in the following subject fields:

1. Mathematics
2. Foreign language
3. English
4. Science

INDEPENDENT STUDY AND THE ENRICHED CURRICULUM

Independent study enables the school to enrich the curriculum with certain kinds of content that do not fit the customary patterns of year-long credit courses.

Typically, such independent study "courses" have the following characteristics:

1. They run for short periods of time, usually five to nine weeks.
2. They meet once a week.
3. No grades are given.
4. Students enroll on their independent study time; such enrollment obligates the student to attend regularly and to participate fully in the course's activities.
5. The school keeps a record of such enrollments but does not otherwise give credit for the course.
6. The content of these courses is of such a nature that it is not included in existing courses within the school curriculum (or is included in courses open to a limited number of students on a credit basis).

Such courses typically are organized in the following fashion:

1. An announcement is made to the students of the course, its content and objectives. All interested are encouraged to enroll. When students register for the course, they do so on a tentative basis, indicating on a chart which modules they have available.
2. By inspecting the availability of teachers, rooms, and students interested, the administration determines on which days and during which modules the course can best be offered.
3. Another announcement is made, this time indicating the specific meeting time of the course. All those who signed up originally and who are available are contacted; any additional students who are interested and are free during the proposed meeting time are added to the rolls.

During the school year 1965-66, the following "independent study courses" were offered successfully:

1. Study Skills. A four-week course which included lectures and demonstrations of such skills as note-taking, preparing for and taking examinations, and planning study time.
2. Contemporary Protest Literature. A nine-week course which focused on contemporary writers whose works were marked by a protest tone or theme. The works of Mailer, Baldwin, Jones, and Ginsberg were among those considered.
3. Junior Great Books Discussion Course. This was conducted by representatives of the nation-wide Great Books program but was organized and administered by the school through independent study.
4. Great Decisions 1966. This is a ten-week course using special materials that provide background information for discussions about the major international decisions of the year.

At the time this booklet was written, other independent study courses were still in the planning stage. Included in such planning were courses on Field Nature Study and Film Study.

INDEPENDENT STUDY AND BROADER HORIZONS

The school makes every attempt to broaden the cultural horizons of the students through independent study. Such attempts usually take one of two forms:

1. Special programs of a cultural nature are scheduled during independent study time for any student interested and available. These programs are announced and publicized in advance: no fee, of course, is charged and no attendance is checked. The following programs of this type were held during 1965-66:

    A. Prints-in-Progress. An artist-print-maker came to the school and gave a lecture-demonstration to all students interested in the process and art of print-making.

    B. One-act play produced by school's dramatic department. The one-act play "Summit Conference" was presented on four different occasions during independent study to enthusiastic student audiences.

    C. University professors were invited in to lecture and discuss with students topics of special interest.

    D. Guidance Programs. These are programs based on student need and interest, which utilize outstanding speakers and films to help students explore various educational and vocational opportunities. These are voluntary and are offered several times a day in order to give maximum potential for attendance.

2. In the second type, the cultural enrichment comes about by opening up special programs of existing courses to students not currently enrolled in that course. The following experiences of this sort were successful in 1965-66:

    A. Art history lectures. Illustrated with slides of great paintings, are a required part of the Art I program; students who did not take Art I were invited in to listen to the lectures.

    B. Humanities lectures. A new course entitled "Humanities-Science-Seminar" made extensive use of guest lecturers and special faculty lectures on such topics as "The Nature of Pacifism," "Evil in Art," "The Essentials of Existentialism." Students who were not enrolled in the course were invited to the special lectures during independent study.

    C. The English Colloquium. As part of the regular English program, teachers with special interests and competencies presented lectures on certain aspects of literature. Following these large-group presentations, these teachers were released from certain supervisory responsibilities to meet with small groups of students who wished to carry on a discussion of the topic presented.

INDEPENDENT STUDY AND THE BASIC COURSE CONTENT

It would be unwise to infer that independent study is something extraneous or ancillary; in a very real sense it is central to the school's program and function. In fact, with certain courses, independent study is used for the required study of basic course content.

The question might be legitimately asked, "Why should basic course content be covered through independent study, rather than the regular classroom?" There are several answers. The first is economy of class time. Requiring that certain content be mastered during independent study frees the classroom teacher to use class time for learning activities that require teacher direction. The second is the opportunity to individualize instruction. In independent study the student is able to move completely at his own pace and is better able to use special materials adapted to his needs. Also, typically in independent study the teacher working with individuals or small groups can thus more effectively provide the specific assistance needed.

The following courses require independent study for mastery of basic course content:

1. English. All students are required to work in the English center for two modules each week on the programed grammar texts. Class time is thus used only to review and clarify the grammar content, not to "teach" it. English teachers will also require that students listen to recordings in the center, of plays being studied in class. Thus, no class time needs to be used for passive listening.

2. Foreign language. Although class time is used in the language laboratory to ensure uniform presentation of certain items, in addition students are required to get additional practice in the language laboratory as part of the normal course expectations.

3. Typing. All typing students are required to get additional typing practice during independent study; this makes it possible to eliminate much routine practice from the classroom setting.

4. Reading Skills. All students enrolled in the Reading Skills course are required to report to the reading center for individual help.

5. Social Studies. Students in the top ability groups in social studies must do certain readings and project work and map study through independent study in the social studies center.

6. Instrumental music. All instrumental music students are expected to schedule additional individual practice sessions.

INDEPENDENT STUDY: ORIGINALITY AND CREATIVITY

Independent study provides the ideal setting for encouraging, stimulating, and motivating creativity and originality. The less structured milieu, the longer periods of time, the proper facilities and equipment--all these help originality and creativity to flourish through independent study--given the proper direction and guidance.

This motivation and direction typically takes three forms at our school.

First, certain courses provide a natural setting for creative and original work. And as soon as the school year starts, the teacher begins through the regular course work to identify students who can do creative work and to stimulate them to begin. The class thus becomes the place where the creative project has its genesis, but independent study time is used for the actual carrying out of the project--although in some cases, the creative project will also require class time. Such creative course work can be found in the following areas:

1. Industrial arts shops. Much emphasis is placed on the creative aspects of projects in wood, plastics, metal working, and architectural drafting.
2. Home economics. A specific attempt is made to encourage girls to do creative projects in both foods and clothing.
3. Art. All students enrolled in art are expected to carry out original projects in many media. Class time and independent study time are provided.
4. Science. So much of the science program is laboratory centered that all teachers find the course a natural setting for encouraging students to undertake original work and research.
5. English--required and elective courses. English, dramatics, and journalism courses provide a natural setting for creative work in written and oral expression. Teachers are encouraged to stimulate such creative work through class and individual attention.

In this first form, then, creative work becomes one of the basic expectations of the regular course content.

In other subject areas, while the content of itself does not necessarily lead to creative projects, the classroom teacher will attempt as soon as possible to identify students in her classes who can undertake creative work on their own in independent study which may not relate directly to class work but which will open up new areas for exploration. The following are typical:

1. Fo[illegible] language. A few very advanced students are able to do creative work in composition and dramatization.

2. Mathematics. The most able mathematics students are encouraged to do original and creative work with problem-solving and the discovery of new proofs.

3. Social Studies. While the social studies department places much emphasis on the library paper which uses primary and secondary sources, there are also opportunities for the student to do original field work. One group, for example, has done some interesting work on an archeological "dig."

4. Music. While the emphasis in our school is on the performing aspects of music, there are opportunities for students during independent study to do some composing of original music.

5. Humanities-Science Seminar. This new course, which focuses on certain major themes that cut across the usual disciplines, requires that each student undertake an original project during independent study. A list of the projects suggested can be found in the exhibits at the end of this publication. (See exhibit 9)

Thus we would find by the end of the first semester that perhaps 10% of the student body are involved in significant major projects of an original nature: some are working on these projects because they are a part of the normal expectations of the course; others are involved because a teacher has reached out and tapped them on the shoulder.

It is at this time--at the end of the first semester--that a major attempt is made to enlist other students in major work projects. This is accomplished in the following fashion:

1. First, the faculty is surveyed to determine their interest in acting as an Independent Study Major Work Project Adviser. No pressure is placed on the faculty to become thus involved. Those who do express an interest indicate the fields where they can provide assistance and resources. (See exhibit 6)

2. The faculty is also surveyed to determine which students have major projects underway.

3. The faculty is also surveyed to find out which students they feel can undertake a major project who are not presently involved in one.

4. These students are called together for a group meeting at which time the advantages and purposes of the major work project are explained to them. They are strongly encouraged to begin work on a major project of their own choosing. Sample projects are suggested to them, and students already embarked upon a project discuss their progress and results with those who have been called together.

5. All students interested in beginning work on a project are asked to select a faculty adviser from the list of faculty members who have volunteered. Thus a student is able to draw upon the entire resources of interested faculty, not just his own classroom teacher, and he is able to select the teacher with whom he wishes to work.

6. If a student wishes to undertake a project and is not able to find a faculty adviser in his area of interest, then the school explores the resources of the community to locate an adult who can work with him.

INDEPENDENT STUDY AND A CHANGE OF PACE

One of the important benefits of independent study too often neglected is that it provides a change of pace from the highly structured class activities. All of us work in fits and starts; few of us can sustain any single type of activity for long periods of time. The adolescent especially will work most effectively if the work periods are relieved by periods of relaxation. At North Campus this takes three different forms:

1. Organized games in physical education independent study. While the student will learn game skills in physical education class, he needs the chance for informal play with adult supervision. This is provided in the physical education independent study program.

2. Student Lounge. The student lounge, furnished, decorated, and monitored by students is a place where students can have a snack, listen to records, converse with friends, and just relax. All students who have no grade lower than a C on the previous report card are given a lounge pass which entitles them to two visits each week to the lounge.

3. Commons A. This is a large 200-seat commons area (used at lunch modules for dining) where students may sit and talk with friends. Teachers are on duty to ensure reasonable discipline. Since students can talk in this commons quite freely, it enables us to provide quiet study in the other commons areas for those who wish to work quietly. Anyone may come to commons A--but he may not stay there for more than one period.

INDEPENDENT STUDY AND HOMEWORK

The school's position on homework stems from the following convictions:

1. There are certain learning activities in every major subject which can effectively be accomplished outside of class with no assistance from the teacher. These become regular assignments that have traditionally been seen as part of the student's responsibilities: reading a book, studying a text, writing a report, solving problems, preparing for an examination are some examples.

2. In terms of the demands of the subjects and the age level of our students, we feel that such daily assignments should average about one-half hour per major subject.

3. Such routine regular assignments should be done at school during independent study only when one or more of the following conditions obtain:

    a. Their completion requires resources (in terms of personnel, material, or equipment) available at school but not at home.
    b. The student feels that his home cannot provide good quiet study conditions.
    c. The student has after-school obligations that severely limit the amount of time he can spend on regular assignments.

4. It is therefore necessary and desirable for the student to develop good habits of regular study at home. Such regular home study satisfies parental expectations about homework, prepares the student for school situations where there is no independent study, and keeps independent study time free for more essential kinds of learning or for tasks requiring school resources.

Since there will be occasions for the student to work quietly on regular assignments or to prepare for examinations, the school provides two large commons areas (Commons B and Commons C), each seating about 200, where quiet study conditions are enforced Teachers are on duty to ensure that quiet prevails; students are told they should study in the quiet commons only when they are working on assignments that do not require the assistance of teachers or fellow students and do not require special materials or resources.

INDEPENDENT STUDY AND PATTERNS OF SUPERVISION

Who supervises independent study? The answers are many and various, depending on the place, the kind of study activity, and the students involved. The following patterns prevail:

1. Teacher supervision. Teacher supervision is required in study areas where there are potential safety hazards, where large numbers of students are present and good control of discipline is important. Teacher direction of independent study--not supervision-- is essential for those learning activities where the unique skills and knowledge of the teacher are required. Hopefully, we shall be able in future years to have less supervision and more direction, and the teacher will be seen more and more as a director of independent learning.

   At the present time, the teacher's day at our school breaks down somewhat as follows:

Adviser room:	3%
Lunch:	6%
Class instruction:	58%
Required supervision and direction of independent study:	12%
Preparation, relaxation, conferences, and voluntary supervision and direction of independent study:	21%

   At the present time teachers supervise the following kinds of learning centers: commons, English, social studies, mathematics, foreign language, reading, science, home economics, typing, art, shops, and physical education.

2. Student-and intern-teachers. Throughout the course of the year student and intern teachers are assigned to the school from nearby universities. They have been used effectively in supervising and directing independent study in every department to which they have been assigned. We feel there has been mutual benefit from such assignment.

3. Paraprofessionals. Paraprofessionals or teacher aides are used in two major areas of independent study:

   a. Lay readers in English come to the school to hold conferences with students on compositions they have written. In addition, one of the lay readers works in the English center two mornings each week to give composition help to those requiring it. A teacher aide also works in the World Civilization study center to direct students using the center.

   b. Discussion leader. The Junior Great Books Discussion course has its own lay discussion leader, trained by the Great Books organization.

4. Student supervision. We have been able to use student supervision and direction in three areas thus far:

   a. Subject matter tutoring. Students selected by math teachers have worked very effectively as math tutors.

   b. Student lounge monitors. The student lounge is monitored entirely by students.

   c. Seminar rooms. Honor society members are on duty in seminar rooms to provide tutoring assistance.

RULES AND REGULATIONS IN INDEPENDENT STUDY

The emphasis here has been to develop a minimum of rules that will permit self-discipline to develop and yet will ensure orderly discipline and productive study. The following rules are stressed and strongly enforced:

1. A student may go to any center he selects; no passes are required and no previous reservation is needed.

2. If a student reports to a center and finds that there is no room for him, he must report immediately to one of the commons. He may not "shop around" for another study center.

3. The student may go to a center only at passing time and he must stay in the center for the entire module. No corridor traffic is permitted except at passing time.

4. The student may not remain in Commons A for more than one module at a time.

5. The student may not use the library to do homework that could be done as well in the commons.

6. Certain study centers are limited to students presently or previously enrolled in that class. (French III, Advanced Spanish, Typing.) Others may use the center with special permission of the teacher in charge.

7. Materials may not be taken from the study centers unless they have been duly charged out, and proper care must be taken of all materials and equipment.

8. Students who use the gymnasium for independent study must be fully uniformed, must take showers, and must stay for two modules.

INDEPENDENT STUDY AND GUIDANCE COUNSELING

Independent study has proved to have many advantages for our counseling and guidance program. The following features are perhaps distinctive:

1. Independent study facilitates individual counseling. The guidance counselor finds it relatively simple to schedule students for conferences during their independent study time, and students are encouraged to stop in during their independent study time to schedule a conference with the counselor. There is obviously no need to have a student released from class in order to see his counselor. Self referrals are high because of ease of access.

2. Films are used effectively during independent study for small and large group guidance. The guidance department schedules films throughout the year which are shown during independent study time to any students interested. During the present school year, films have been shown on the following subjects: the importance of staying in school, opportunities in the armed forces, career and vocational guidance, opportunities in higher education.

3. The counselor can work with small groups of students who have common problems or interests during their independent study time.

4. Career and vocational guidance has been strengthened by having adults from the community speak to small groups of students during independent study on their specific occupations.

5. Students during independent study are encouraged to use filmstrips, recordings, tapes, catalogs, pamphlets in the guidance career-and-college center in the guidance suite as well as the materials provided in each of the departmental and library satellite centers.

6. The principal and his assistants have met regularly during the year with small groups of students--self selected and recommended by faculty--during their independent study time to exchange ideas, air grievances, and get to know one another better.

As indicated previously, the counselor plays a key role in orienting the student to independent study, in helping him plan his time, and in helping him find more effective ways of using his time.

Dental hygienist, nurses, and school therapist also schedule conferences and examinations during independent study time.

INDEPENDENT STUDY AND THE ACTIVITY PROGRAM

An unlooked-for bonus has been the way independent study and the extra-curricular activity program have helped each other flourish. Independent study has helped the activity program in the following ways, for example:

1. Certain school clubs stress independent study as an important aspect of the club's program. The Future Scientists of America, for example, have stimulated, organized, and set up numerous research projects carried out during independent study time focusing on nutrition and genetics in animal research.

2. Major school organizations utilize independent study time to accomplish important work. Much of the school publications work is carried out by its staff during their independent study time, for example. Student Council committees will attempt to schedule meetings during independent study time so as not to interfere with instruction.

3. Many clubs use independent study time to hold committee meetings and small group meetings. Ordinarily, it is not feasible for an entire club to meet during independent study since all the members would not have common time available, but executive groups and committees can get together without undue difficulty.

4. Student Council assumes a special responsibility in publicizing independent study and selling students on its merit. A special council committee works with the coordinator of independent study.

5. The school chapter of the Honor Society organized a special tutoring program through independent study, and honor society members assist in the proctoring of seminar rooms.

INDEPENDENT STUDY AND THE ROLE OF THE TEACHER

Independent study demands that we take a look at the role of the teacher--and the kind of teacher we hire. We see the teacher playing a crucial role in supervising, stimulating, and directing independent study. Let's take a look at each of these functions.

The Teacher as Supervisor in Independent Study

If any independent study is to be effective, the student must develop self-discipline and self-direction. He cannot do this if the teacher views himself as a policeman or spy. Instead, the teacher asks this basic question: Is the student's behavior appropriate for the situation, the learning activity, and the setting?

What is appropriate student behavior?

1. It is not distracting or disturbing to others.
2. It is not endangering himself or others.
3. It is helping him satisfy a worthwhile need, (and the need to relax and let off steam is worthwhile--given the appropriate setting and means.)

If the student's behavior is not satisfactory and appropriate, what can be done?

Sometimes the simplest and best answer is to change the environment, not the behavior. ("Your talking in the library is bothering others. Why not go down to the lounge where you can talk without bothering anyone.")

The basic rule, however, is as follows: use the minimum amount of direction that will enable the student's behavior to become satisfactory. Sometimes a look or a quiet word will suffice. Don't pull out all the stops for every offense; save your big guns for big problems.

The teacher's role in initiating and stimulating independent study.

1. Know the student's interests and appeal to these. But also make a distinct attempt to broaden his interests.
2. Stress the importance of independent study. He'll unconsciously be influenced by your own attitude towards it.
3. Suggest areas for independent study that relate to and emanate from curricular concerns. The best independent study is not extraneous to but an intrinsic part of the curriculum.
4. Stress not what is known about your subject--but what is unknown; not what has been discovered, but what has not been discovered.
5. Pique his interest by dropping hints about projects he might undertake. Resist the temptation to give answers--raise questions instead.

6. Teach him how to raise the right kinds of questions. While we do not denigrate serendipity, we know the importance of asking the right questions.

7. Set a good example by telling him of your own independent study.

8. Suggest diverse methods of investigation. Discuss with him several alternate approaches.

9. Give the kind of meaningful assignments that will make him want to work independently.

10. Make available all resources he will need for his independent study.

11. Make yourself available; you are the most important resource of all.

12. Encourage him to share the results of his independent study with his classmates--and make it possible for him to do this.

Mr. James Smith, coordinator of humanities-science seminar, has developed an excellent guide which outlines the complete task of directing an independent study project from start to finish. We are happy to quote from it here:

PROJECT GUIDE

I. Selection
    Definition of project
    Teacher presentation of alternatives
    Expectation of students' wavering in choice
    Conferences with individual students
    Require draft of planned project

II. Preparation
    Location of materials
    Preparation of use of facilities

III. Organization
    Outline procedures in chronological order
    Required progress report

IV, Incubation
    Students need time to work, think, experiment
    Teacher guidance, conferences

V. Re-organization
    For students who falter
    Require final re-definition or draft of project or progress report

VI. Evaluation
    Require student presentation, display or performance

REPORTING TO PARENTS

In addition to the flyers and memos mentioned previously in the discussion on orientation, we have taken certain other additional steps to inform parents of the student's use of independent study:

1. A reminder is sent home to the parent, stressing the importance of remedial independent study, listing the remedial opportunities available, and indicating how the parent can check on use. (See Exhibit 9.)

2. During the third report period, the student carried with him each day an independent study check-up card; when he reported to an independent study center, the card was punched in an appropriate block. At the end of the week the student then had a complete record of how he used all his independent study time, then addressed an envelope to his parents, an explanatory letter and his record card were enclosed and mailed home.

3. We are exploring for the next school year the use of data processing equipment for the reporting of independent study center use and the modification of the present report card to include teacher-reporting on independent study.

INDEPENDENT STUDY--AND CONTINUING EVALUATION

Introduction

Many of the most desired results or outcomes of independent study will never be measured or observed, at least by those administering the program. Who can measure the new insight or interest in a subject field that may have resulted from supplementary readings in a resource center and what may be the motivation for a creer choice sometime in the future? At best, we can only measure student involvement, use of the facilities and equipment, utilization of unscheduled time and finally make a guess at the effect of these three on scholastic achievement.

The following methods have been of some value to us in evaluating independent study:

Qualitative evaluation

1. Informal visitations to the centers
2. Student and parent feedback from individual interviews or conferences
3. Meetings between randomly selected students and the principal
4. Discussion groups in adviser rooms guided by a student discussion leader using formulated questions as a discussion guide (See Exhibit 11)

Quantitative evaluation

1. Independent Study Questionnaire (See Exhibit 12)
2. Weekly statistical report on attendance from center supervisors

How often are evaluations made?

We feel strongly that the methods listed as qualitative evaluative devices must be used continually as long as the program is scheduled if we are to be alerted to deficiencies, successes, or necessary changes in the program.

The questionnaire which supplies us with the important quantitative data is distributed and completed in early November after the program has been initiated and stabilized. We tentatively plan to administer the same questionnaire sometime in May so that we have some measure of the change in student involvement throughout the school year.

Outcomes of the evaluations

Informal visitations, feedback from parents and students, and meetings with students have revealed a very positive reaction to independent study. Criticisms for the most part were in reference to the availabilities of the facilities and were in a sense a plea for more of what we already have.

The remainder of this evaluation will take the form of a three part summary which includes the following:

1. A resume of the discussions held in the adviser rooms under the direction of a student leader
2. A review of the data obtained from the questionnaire
3. A summary of the statistics reported from clinic and center supervisors

I. SUMMARY OF ADVISER ROOM DISCUSSIONS

Introduction

The advisers in each adviser room were notified of our interest in holding discussions on the topic of "independent study" and that these discussions were to be conducted under the direction of student leaders. Names of capable students who could serve as discussion leaders were submitted to the coordinator. A meeting was scheduled with the principal, coordinator, and student leaders for the purpose of outlining the mechanics of the discussion and reviewing the questions formulated as a guide. Another student, selected by the leader, acted as the recorder, summarizing the responses to each question. These resumes were forwarded to the coordinator immediately following the discussion period.

Advisers confirmed what the summaries indicated, that discussions were alive with plenty of exchange and participation.

The following part of this report will consist of the questions posed by the leaders, a consensus of the response, and sample comments that were the most interesting.

1. If students were not allowed to talk in Commons A, would student discipline in general throughout the school get better or worse?

Consensus:

An almost unanimous feeling that discipline in general throughout the school would get worse; students must release energy, steam or emotions; and if this does not happen in Commons A, it will happen elsewhere.

Sample Comments

a. Student discipline would not improve; students would talk elsewhere
b. Students would talk in quiet commons or the library; lunch is too short - not enough time to talk
c. Good to break the monotony of the day and to discuss things. Students would talk in B and C

2. Should students be allowed in Commons A as a "talking commons" only if they have passed all major subjects?

Consensus:

Not clear - students were pretty well divided on whether grades should affect who is admitted to "A".

Sample Comments

a. All students should be admitted
b. One mod in "A" regardless of grades
c. Only allowed in with a "C" average or better
d. Yes, because people who are failing should be using other study facilities

3. Are there any other suggestions you have for improving Commons A?

Consensus:

Little consensus on anything realistic.

Sample Comments

a. Lost and Found located in A
b. School store open
c. Sell pretzels, cokes, etc.

4. Based on our present 17 module day (85 modules per week), what do you think is the ideal number of modules the average 9th grader should have for independent study every week?

Consensus:

Between 20 - 25 modules per week.

5. What do you think are the main advantages of independent study from the student's point of view.

Consensus:

The majority felt it was a good time to get help and to work on homework. Many felt the availability of the library, the resource centers and the language labs was a distinct advantage.

Sample Comments:

a. Less homework
b. Found that the library, language labs, clinics, etc., were just as important as tests and homework
c. Teacher's help; special books

6. How would you improve the various departmental study centers?

Consensus:

Additional English and language centers should be opened. Specific rooms should be assigned permanently for math and science resource centers. All centers should be opened for additional modules during the morning. A need for more resource materials exists in most of the centers.

Sample Comments:

a. Should be more English and language clinics
b. More materials in the library
c. Have math clinics in the same rooms instead of changing rooms every module

7. Do you think we have enough remedial clinics, and are you getting enough help in them? Are there any areas where more remedial clinics are needed?

Consensus:

Little response on this question, which seems to be sort of a tacit testimony to the extensive remedial program already in existence. One suggestion appearing more than once was that of creating language clinics as a supplement to the language laboratory program.

Sample Comments:

a. Should be a language clinic in addition to the labs
b. Need another English clinic; clinics in language

8. What suggestions do you have for improving the library and its operation?

Consensus:

There were frequent responses to the effect that additional books are needed in the library. Comments varied as to the types of books that are needed, with some indicating a need in specific subject areas, others requesting science fiction and mysteries, and many just asking for additional reference books in general.

The need for additional typewriters was mentioned by a few students.

There was also a general feeling that space in the library could be more wisely utilized. Empty shelves could be removed and tables, chairs, and lounge furniture could be put in their place.

Sample Comments:

a. More fiction, more reference
b. Not enough books in subject areas where you need them, such as science and World Civ.
c. More sitting space and tables
d. More typewriters necessary
e. More books and typewriters
f. More books - science fiction and mysteries
g. Take out empty book shelves and make more room for kids

9. Are there other kinds of study centers which you would like to see opened?

Consensus:

Frequent requests were made, by both the boys and girls, for specialized gym clinics - basketball, wrestling, etc.

Specialized language centers were requested by a few students, with one student requesting a German clinic.

A mechanical drawing clinic and a music appreciation clinic were the only other types of centers mentioned.

Sample Comments:

a. Open a mechanical drawing room
b. More gym clinics
c. Sports clinics such as basketball, wrestling, etc.
d. Advanced gym clinics
e. German clinic
f. Music appreciation

10. What is the best way that we can reward and recognize students who have done a good job on independent study - points, grades, awards, displays?

Consensus:

About two-thirds of the groups responding indicated quite clearly that they felt that no recognition was necessary for those students doing a good job. Good grades will result from successful use of independent study, and this is reward enough. One interesting suggestion was the creation of an achievement roll in addition to an honor roll.

Sample Comments:

a. Satisfaction of getting good grades by using the clinics is the best reward
b. No recognition
c. Achievement roll similar to honor roll
d. You get your own reward by being able to improve grades

11. Do you think that many 9th graders could handle a major independent study project that would require original work, would last for several weeks, and which might require some work outside of school?

Consensus:

A significant number of groups responded positively to this question, with the following qualifications, however: that the projects don't last too long, and that they are offered on a voluntary basis. About one third of the groups gave a flat no as their response. One group questioned the relevancy of the question in so far as projects had already been assigned.

Sample Comments:

a. Yes, if it doesn't last too long
b. Yes, depending upon interest
c. Yes, if not pushed on as an assignment

12. Do you have any general suggestions for improving independent study?

Consensus:

No consensus was apparent on this question. There were numerous suggestions, but none appeared more than once. Some of the more constructive suggestions are listed below.

Sample Comments:

a. More free mods in the gym
b. Two teachers in math and composition clinics
c. Freer use of seminar rooms
d. Television in clinics
e. English and World Civilizations clinics opened all the time
f. Put a dictionary in every clinic

II. SUMMARY OF RESULTS OF INDEPENDENT STUDY QUESTIONNAIRE

November, 1965

Introduction:

A questionnaire (see Exhibit 12) was given to 741 ninth grade students in adviser room. The adviser stressed with the students the importance of answering the questions completely and honestly. Students had the opportunity of asking questions about items that were unclear to them. Their responses were tallied and summarized; separate tallies were made of those who had received failure notices and those who had not.

TABLE I

COMPARISON OF UNSCHEDULED MODULES WITH FAILURE NOTICES

Number of unscheduled modules per week	Students not receiving failure notices (487)	Students receiving failure notices (254)	Total (741)
11 - 15	10 50% Enough 30% Not enough 20% Too much	1 0% Enough 100% Not enough 0% Too much	11 46% Enough 36% Not enough 18% Too much
16 - 20	95 68% Enough 28% Not enough 4% Too much	55 51% Enough 45% Not enough 4% Too much	150 62% Enough 34% Not enough 4% Too much
21 - 25	299 80% Enough 13% Not enough 7% Too much	153 65% Enough 28% Not enough 7% Too much	452 75% Enough 18% Not enough 7% Too much
26 - 30	83 70% Enough 12% Not enough 18% Too much	45 64% Enough 24% Not enough 4% Too much	128 68% Enough 16% Not enough 16% Too much

Summary of the data. A summary of the time available in student schedules for independent study and their reaction to it.

1. The median number of periods of independent study reported was 22. Sixty percent of the group reported that they had between 21 and 25 periods of independent study each week. There was no significant difference between one group and the other in the amount of independent study time.

2. Close to 70% of the students surveyed felt that they had "just enough" independent study time; 22% felt they had "not enough" independent study time; 8% felt that they had "too much" independent study time. The only major group of students who felt that they had too much time were students not receiving failure notices who had between 26-30 periods of independent study time; 18% of this group felt that they had "too much" time. The most significant group reporting not enough time were the students receiving failure notices who reported from 16-20 periods of independent study time: 45% of this group felt that they did not have enough independent study time. Of the modal group (those reporting from 21-25 periods of time), 75% felt that they had "just enough" time; 18% felt that this was "not enough" time; 7% felt that this was "too much" time.

Conclusions

1. The students surveyed seemed satisfied with the amount of independent study they had; greatest dissatisfaction was expressed by successful students with much time (26-30 periods), 45% of whom felt they did not have enough time. A general conclusion might be that students learn to accept and adjust to whatever amount of time they find themselves with.

Recommendations

1. We should explore ways of helping the passing student with much time utilize his time better with enrichment and acceleration projects.

TABLE II

The Time Spent Each Week in Departmental Centers

Area	The number of students from the sample spending a given number of modules in each center			Percentage of the student body, projected from the sample, that spends a given no. of modules in each center			
	Major Subject Area						
N = 741	1-2	3-4	5-6	1-2	3-4	5-6	Total
English	367	161	35	50%	22%	5%	77%
Social Studies	292	86	20	40%	12%	3%	55%
Mathematics	184	39	14	25%	5%	2%	32%
Science	82	15	5	11%	2%	1%	14%
Foreign Language	157	213	67	21%	30%	9%	60%
Business	48	8	2	6%	1%	-	7%
	Minor Subject Area						
Reading	60	33	17	8%	4%	2%	14%
Physical Education	43	15	5	6%	2%	-	8%
Music	33	18	3	4%	2%	-	6%
Art	46	8	9	6%	-	-	6%
Home Economics	23	30	3	3%	4%	-	7%
Industrial Arts	34	13	9	4%	2%	-	6%

Summary of the Data

1. Of the so-called major subject areas, the English, Foreign Language and Social Studies centers were attended by more than 50% of the students surveyed. 77% of the students reported attending the English clinic sometime during the week, with 27% of this group reporting for more than 2 periods. Of the 60% visiting the language centers, 40% reported for more than 2 periods.

2. Thirty-two percent of the students reported using the Math clinic while 14% of the students indicated they had spent time in the science centers.

3. While only 7% of the group reported attending the business clinics, it should be pointed out that only a small fraction of the student body have scheduled business subjects.

4. Of the so-called minor subjects, 14% of the students reported attending the Reading Clinic while roughly 6-8% of the students attended each of the other centers.

Conclusions:

Of the students surveyed, a greater percentage, roughly 55-80%, spent their independent study time in the English, Foreign Language and Social Studies centers. Fewer students attended the Math and Science clinics. Only in the area of foreign language did the number of students reporting for 3-4 modules per week exceed the number reporting 1-2 modules.

Recommendations:

1. We should designate a specific room for each department to be used as a resource center. Major subjects showing a low percentage of attendance have scheduled their clinics in many different rooms.

2. When the schedule and staff permit, science and physical education centers should be opened for additional periods.

3. Greater emphasis should be placed on major work projects in math and science.

TABLE III

Time spent in I.S centers
other than the departmental centers

		1 - 3 pers	4-6 pers	7-9 pers	10-12 pers	Total Percent
LIBRARY	Number of students	213	325	97	62	
	Percent of sample	27%	44%	13%	8%	92%
COMMONS A	Number of students	294	137	61	52	
	Percent of sample	40%	18%	8%	7%	73%
COMMONS B	Number of students	301	166	99	34	
	Percent of sample	41%	22%	13%	5%	81%
COMMONS C	Number of students	231	125	56	17	
	Percent of sample	31%	17%	8%	2%	58%

Summary of the data:

1. Ninety-two percent of the students surveyed reported that they had spent time in the library, during the week the study was made. Over 40% of this group spent from 4-6 periods in the library; 8% were there as often as 12 periods.

2. While 73% of the students reported spending time in Commons A, (the talking study), 40% of these students were there for only 1-3 periods.

3. As many as 81% of the students surveyed reported spending time in a quiet study area. Half of this group spent 1-3 periods per week in the center while the other half spent anywhere from 4 to 12 periods in quiet study.

Conclusions:

1. The library is used by more students than Commons A is used.
2. The majority of the students using the library are there 4-6 periods per week, whereas the majority of students in Commons A prefer to be there for only 1-3 periods.
3. General conclusion might be that the majority of the students are taking advantage of the quiet study areas and are not misusing or over using the talking study.

Recommendations:

Other approaches should be investigated to determine the validity of these specific data.

TABLE IV

Use of Equipment and Resources

	Number of students using following materials and equipment	Percentage of students sampled that use resources listed	Total number of students in the school projected from the sample
Books	549	74%	1,332
Magazines	413	56%	1,008
Newspapers	227	30%	540
Typewriter	207	28%	504
Tapes	181	24%	432
Record Player	175	24%	432
Programmed Texts	168	23%	414
Records	152	20%	360
Filmstrips	106	14%	252
Filmstrip Viewer	98	13%	234
Tape Recorder	82	11%	198
Microscope	81	11%	198
Slide Projector	61	8%	144
Movie Projector	51	7%	126
Reading Accelerator	48	6%	108
Cartridge Projector	12	1.6%	30

Summary of the data:

1. Seventy four percent of the students sampled read some kind of book during the week of the study.

2. Roughly 55% looked at or used a magazine, 30% read the newspapers; and 18% found the typewriters useful in completing assignments.

3. From 20 to 24% used records, tapes and programmed texts.

4. From 11 to 14% used filmstrips, tape recorders and microscopes.

5. Six to 8% used the slide projectors, movie projectors, and experimented with the reading accelerators.

6. A few students found the 8 mm cartridge projectors useful.

Conclusions:

1. A relatively high percentage used the printed resource materials, obviously because they were more abundant.
2. Tapes and records have much appeal and utility.
3. All of the different kinds of equipment and resources were used by a significant number of students.

Recommendations:

1. Many of the centers contain only a limited amount of materials and equipment. Consequently, each department must consider its potential and request materials and equipment commensurate with its needs and potential.

TABLE V

Priority list of the kinds of major projects having the most appeal

Types of projects suggested	Number of students indicating an interest	Percent of the sample
Perform lab experiments	321	43%
Perform field work	155	21%
Create work of art	150	20%
Build a model	147	19%
Write research papers	141	19%
Collect materials	113	15%
Construct electronic equipment	111	15%
Design house plan	109	15%
Conduct community research	90	12%
Write original play	70	9%
Keep progress chart	62	8%
Make chest of drawers	42	7%

Summary of the data:

1. Forty three percent of the students surveyed indicated that working through laboratory experiments holds the most appeal as a project.

2. Between 19-21% of the students showed an interest in field work, creative art work, model construction, and writing research papers.

Conclusions:

1. Laboratory work ranks high on the list of projects having the most appeal.

2. Beyond the priority shown for laboratory experiments, little in the way of a pattern emerges.

Recommendations:

1. Greater direction and motivation must be given to those interested in science work that is centered around the laboratory.

2. Teachers should use more imagination in assigning projects, seeking greater variety in the types of projects offered and avoiding the stigma associated with written reports.

III. Statistical Reports from department chairmen

While the first two parts of this report were based on a week in November when the student discussions were held and the questionnaires completed, this part of the report will cover the period from the start of school to the last full week of school in December.

Each week statistics are turned in to the coordinator, showing the attendance by modules for each period that the centers are open. The last part of this report is a summary of attendance statistics for the first eleven full weeks of school.

TABLE VI

Attendance - Major Subject Area Centers

Week of	Subject Area						
	Library	English	Social Studies	Math	Science	Foreign Language	Business
September 27	6,396	500	334	101	391	1,451	60
October 4	4,336	500	275	78	187	976	79
11	7,197	888	484	125	544	1,362	81
18	7,551	1,033	500	241	633	1,236	190
25	7,460	1,454	799	227	659	1,536	162
November 1	6,811	1,334	953	242	713	1,407	203
8	7,367	1,425	892	282	579	1,536	201
15	7,526	1,442	739	271	548	1,325	272
29	6,761	1,429	567	348	788	1,390	328
December 6	6,582	1,423	829	296	782	1,484	377
13	6,888	1,456	908	345	875	945	304
Total to date	74,875	12,884	9,280	2,556	6,799	14,648	2,257
Average per week	6,807	1,171	844	232	618	1,331	205
No. of modules per week clinics opened	85	60	55	50	31	90	20
Average No. per module through 11 weeks	80	20	15	4.6	20	15	10
Average No. per module - Week of December 13	81	24	17	7	28	*Dec. 6 17	15

Summary of the data:

1. An average of 6,807 students per week used the library during the first three months of school. For a facility opened for 85 modules, this means an average of 80 students per module.
2. English and foreign language clinics have averaged over 1,000 students per week. In English this means approximately 20 students per module, while in the language clinics the number per module is closer to 15.
3. Social studies clinics show an average per week of 844 with an average per module of 15.
4. While science reports a lower average (618) per week than some of the other major subject areas, the average per module is still around 20.
5. The mathematics and business departments report an average number of students per week of slightly over 200, making an average per module for Math of about 4.5 and for business about 10.

Conclusions:

1. The majority of the centers report impressive statistics on totals and averages.
2. While a much higher total is shown for certain areas, the average number of students per module for four of the five required major subjects is between 15 and 20. What this can mean, however, is that when the clinics are opened for additional periods they will accommodate that many more students and still carry a high average.
3. The weekly average and module average in mathematics are low primarily because the independent study work in math is remedial in nature and only a few students at a time can be helped.
4. The average per module for the week of December 13 is higher than the average per module through the 11 weeks, indicating that attendance has picked up and the lower average through 11 weeks is due to a much lower number at the beginning of the term.

Recommendations:

1. Statistics show that where staff, schedule, and facilities permit, additional centers should be opened. This is especially true in science.
2. Independent study in Math should be broadened to include major work projects as well as other activities such as the use of logic games.

TABLE VII

Attendance - Minor Subject Area Centers

Week of	Subject Area						
	Phys Ed	Home Ec	Ind. Arts	Reading	Music Voc.	Music Inst.	Art
September 27	24	53	16	200	33	198	59
October 4	32	74	4	238	35	201	69
11	23	91	23	228	25	192	124
18	14	92	72	300	37	171	108
25	17	142	87	346	30	163	221
November 1	28	173	107	460	30	180	275
8	69	192	110	360	24	184	221
15	86	251	104	339	34	256	211
29	87	263	142	334	32	198	221
December 6	130	331	145	325	30	258	291
13	112	536	149	122	30	70	350
Total to date	622	2,198	959	3,252	340	2,071	2,150
Average per week	57	200	87	295	31	188	195
No. of modules per week clinics open	8	12	22	17	12	21	18
Average No. per modules through 11 weeks	7	17	4	17	2.6	9	11
Average No. per module week of December 13	14	45	7	*Dec. 6 19	2.6	*Dec. 6 12	19

Summary of the data:

1. The data show that approximately 300 students report to the Reading clinic each week. This means that since the clinic is open for 17 modules the average number of students reporting each module is about 17.

2. Home economics, Art and Instrumental Music centers average about 200 students per week, with averages per module of 17, 11, and 9 respectively.

3. Weekly averages for the other 3 minor subjects, Industrial Arts, Physical Education, and vocal music, are 87, 57, and 31 respectively.

Conclusions:

1. Reading, home economics, art, instrumental music, and industrial arts report attendance figures that are commendable for minor elective areas.

2. The attendance in physical education centers is low, considering the wide appeal physical education should have as an independent study activity.

3. Attendance at the vocal music centers is low because of the nature of the activity and also because of the limited time available.

Recommendations:

1. If the availability of facilities and the schedules of the staff permit, physical education areas should be opened for additional periods.

2. Because of the success of the reading center, an effort should be made to increase the amount of time alloted for independent study in this area.

INDEPENDENT STUDY AND THE CHALLENGE AHEAD

This report was written only a year and a half after the school was opened and the program initiated. All that has been described thus far are programs and procedures in actual operation; we feel what we think is justifiable pride that the faculty has accomplished so much in so little time.

But we still see much that needs to be done, and we conclude this booklet with a vision of what can be done with a little more imagination, a little more money, and even greater effort.

1. Greater use of paraprofessionals. Hopefully, we can eliminate completely the need to use teachers as supervisors of the commons study areas. Using paraprofessionals here would enable us to place teachers in study centers where they can really work effectively.

2. Greater use of independent study for mastery of basic course content. The special virtues of independent study suggest that we must move in the direction of more independent study and less structured class time for mastery of basic course content. In certain subjects like chemistry, industrial arts, home economics, and art where learning is essentially "laboratory" centered, there is an obvious justification for such a move. Plans are underway, for example, to identify highly motivated students who will enroll for chemistry next year and to schedule them for a special chemistry course which will place the major stress on independent study for the mastery of basic course content, thus freeing the student to move ahead almost completely at his own pace.

3. Increased allotments for materials and equipment in study centers. Although we have made much progress here as a result of our own effort and the assistance and guidance of Mr. Arthur MacDonald, township director of audio-visual instruction, we still see that much more can be done. If the centers are to be live centers of learning, they must be fully equipped with the best possible learning aids that will help create a learning environment which the student will find irresistible.

4. Increased space for independent study. Largely due to the wise planning of Assistant Superintendent Carl J. Manone, the building is uniquely constructed so as to facilitate independent study. However, here again, success breeds problems. As students learn to work independently, there will be less need for traditional classrooms and more need for independent learning space. Perhaps within a few years we will be able to find ways of modifying existing space to accomplish this objective without excessive cost.

5. Increased personnel for coordinating the program. If independent study is to assume its rightful place in North Campus education, it will absorb the full attention of one of the faculty. At the present time, Mr. Daniel Turner, coordinator of independent study, has accomplished a great deal with only a portion of his time available for the task. Hopefully, it will be possible within a year or two to release him from all classroom instruction in order to devote full attention to this responsibility.

EXHIBIT 1

Abington High School
North Campus
Abington, Pennsylvania

PLANNING YOUR INDEPENDENT STUDY TIME FOR NEXT YEAR

To the student and the parents:

As you look ahead and plan next year's schooling, one question that must be answered is, "How much time should be reserved for independent study?" This memo is intended to help you answer that question.

1. How many periods or modules in a week? Next year there will be 17 modules a day or 85 a week. Five of these will be used for lunch. Eighty are left for class and independent study.

2. How many modules of independent study constitute an absolute minimum for all students? We suggest that all students allow enough independent study time for the following activities:

Study Activity	Modules Required Each Week
Reading, research in library	5
Reading and study in World Civilization Center	2
Study and use of programed text in English Center	2
Study and homework in quiet study center	5
Total	14
In addition all foreign language students should use language laboratory	2
Total for those taking foreign language	16

These 14-16 modules constitute the basic independent study for all students. They provide time for the student to use the library; cover some basic course content in language, English and social studies; and do some homework or review for an upcoming test.

3. How many additional periods of independent study should be provided for beyond this basic program? This answer depends on several factors:

   a. How much remedial help will probably be needed? Remedial clinics are available in English composition, foreign language, mathematics, science. Most students from time to

EXHIBIT 1 (cont.)

time throughout the year could use from 3-6 modules of such remedial help.

b. How interested is the student in enrichment opportunities? Through independent study time the interested student will be able to enroll for special seminar and discussion courses, see educational movies, carry out research projects, hear guest speakers.

c. Is the student taking courses which require independent project work? In courses like industrial arts, home economics, art, and chemistry, much emphasis is placed on the completion of independent projects during study time.

d. To what extent is the student able to plan and use time wisely? Even though independent study is designed to help students develop these abilities, it is probably unwise to give the very immature student too much time which he will be tempted to waste.

4. What is the average amount of time recommended for most students? In general--within the guidelines suggested above--most 9th graders should average about 21 modules of independent study time and most 10th graders, about 25 modules. The over-all school average this year was about 23.

5. What is the maximum amount of independent study time? It is unlikely that students at this age can profitably use more than thirty modules of independent study time.

EXHIBIT 1 A

HI! WELCOME TO NORTH CAMPUS!

What kind of school have you come from?

Did you have much time in your school day there that was unscheduled? You know FREE TIME! Ever heard of INDEPENDENT STUDY?

Enough questions - let's tell you about it. INDEPENDENT STUDY is for everybody here at North Campus. That's right, everyone - not just the "brains."

First, take a look at your schedule. If yours looks like most, then out of 85 blocks probably 20-25 will be empty. Right! We only tell you where to go 3/4 of the time you are in school.

Second, YOU have to make the big decision about the other 1/4 of your time. Your teachers, counselor, and even your parents will suggest how you ought to use your time but the pressure is on YOU!

Third, this school really offers you plenty. There are lots of places to go and things to do with that 1/4 free time. No matter what kind of grades you made in your last school, you can do better at North Campus if you take advantage of INDEPENDENT STUDY TIME AND OPPORTUNITIES.

Fourth, take a look at the next four pages for some ideas and then really get involved in North Campus INDEPENDENT STUDY!

EXHIBIT 2

ABINGTON HIGH SCHOOL
NORTH CAMPUS
Abington, Pennsylvania

August 16, 1965

To the students and parents of North Campus:

This notice contains some highly important information about the coming school year. Read it carefully and then save it for future reference.

Since our independent study program was so successful this past year, we are expanding slightly its scope and coverage for the coming school year. Our independent study program provides time during the school day for each student to undertake a variety of independent learning activities when he is not assigned to a specific class. Although there are very specific rules and regulations governing its operation, and there is close supervision by the entire faculty, the independent study program attempts to develop a sense of responsibility and self-direction in the student, in addition to giving him many opportunities for special kinds of study activities.

The following list indicates some of the learning activities which the student can pursue during independent study time:

a. He can get remedial help from a teacher or student tutor. Shortly after school starts, we will set up regular remedial clinics for those who can profit from this additional help.
b. He can use the language laboratory for additional practice in a foreign language.
c. He can practice typing in one of the typing rooms.
d. He can work on projects of special interest in the art rooms, the shops, the home economics rooms, or the science laboratories.
e. He can read or do research in the library.
f. He can work with special study aids in the social studies clinic and the English clinic.
g. He can work out in the gymnasium under teacher supervision.
h. He can attend supplementary large group lectures in areas of interest to him.
i. He can do his homework in our commons study areas.

We purposely list homework last in the kinds of activities available. The chief purpose of independent study is to use school facilities and staff for special kinds of study help not available at home; most homework should still be done at home.

Exhibit 3

ABINGTON HIGH SCHOOL
NORTH CAMPUS
Abington, Pennsylvania

To the parents:

The purpose of this letter is to inform you about the advantages of and opportunities for independent study and to enlist your cooperation in helping your son or daughter plan and use independent study time wisely.

As you probably know by now, each student has about one-fourth of his school time when he is not assigned to class; during this independent study time, he may use any of the facilities and resources shown on the attached sheet to work on his own or to get the help that he needs. We feel that the independent study program has many advantages: it helps the student gain some independence in learning how to plan and use his time; it provides him with an opportunity to get assistance from teachers during the school day; it enables him to use many of the special facilities that the school provide; it gives him the time and the place to work on his own on projects of special interest.

We have found that in the early part of the year most students need much help from teachers and parents in learning how to use independent study. You can be of help now in the following ways:

1. Review with your son or daughter the independent study opportunities listed on the attached sheets.
2. Make sure that the student understands that most homework is probably still done best at home: independent study should be used chiefly for those activities requiring facilities not ordinarily found in the home. And regular home study is an important part of building good study habits.
3. Work out together with the student a balanced program of independent study for the week to come, using the schedule blank provided. Some suggested guidelines: all students should spend at least four periods in the library; foreign language students should spend from 2-4 periods in the language laboratory; typing students should spend 1-3 periods in typing rooms.

To ensure that all parents receive this bulletin, we would like you to sign your name in the space indicated below. This will merely acknowledge the fact that you have received this information.

If you have any questions about independent study, please do not hesitate to give us a call.

Dr. Allan A. Glatthorn,
Principal

- -

Student's Name ______________________ Homeroom ______________

This acknowledges receipt of independent study bulletin.

____
Parent's Signature

EXHIBIT 4

SCHOLASTIC WARNING NOTICE - Abington High School, North Campus, Abington, Pennsylvania

______________________________Student's Name Report Period 1 2 3 4
Last First

__________________________Advisor Room Date Issued__________
Number House

Subject__________

DEAR PARENT(s):

This is to inform you that your son/daughter is:

( ) not working up to ability, ( ) in danger of failing, ( ) doing failing work.

The probable cause(s) is (are):

( ) 1. Poor or incomplete information
( ) 2. Inadequate performance on tests.
( ) 3. Insufficient class participation or seminar
( ) 4. Negative or uncooperative attitude
( ) 5. Insufficient effort
( ) 6. Absence without making up work
( ) 7. Inadequate reading and writing skills.
( ) 8. Inadequate speaking and listening skills
( ) 9. Insufficient use of study centers
( )10. Lack of self-discipline
( )11. Inattentive in large group instruction
( )12. Failure to follow instructions
( )13. Unsatisfactory homework
( )14. Poor study habits

The following steps should be taken:

( ) 1. Parent conference with teacher (Phone our receptionist for appointment, TU 4-4700, Ext. 214.
( ) 2. Student should secure additional help from teacher
( ) 3. Student should make better use of independent study time and facilities
( ) 4. Student should spend more time on home preparation
( ) 5. Student should take a more active part and be more responsible in class

I am sending this SCHOLASTIC WARNING NOTICE to you in the hope that we may combine our efforts more effectively and bring about the desired improvement. To improve this inadequate performance, help may be secured through the teacher and department center.

Blue - To Parent White - To Counselor

____
Teacher of subject listed above

EXHIBIT 5

ABINGTON HIGH SCHOOL
North Campus
Abington, Pennsylvania

OPPORTUNITIES FOR INDEPENDENT STUDY AT NORTH CAMPUS
A list of Activities, Areas and Materials

LIBRARY
- Listen to tapes and records
- Use reference books
- Read for pleasure
- Type reports
- Use listening carrels
- Read magazines

FOREIGN LANGUAGE
- Two language laboratories
- Advanced French Resource Center
- Spanish enrichment groups
- 54 remedial clinic sessions

SOCIAL STUDIES
- Social Studies Resource Center
- Special enrichment projects
- Tapes, Filmstrips, paperbacks

ENGLISH
- Composition clinic
- English Resource Center
- Use of programmed textbook
- Filmstrips, recordings, tapes
- Paperback book store
- Magazines

MATHEMATICS
- Mathematics Project Center
- 50 mathematics clinics
- Student tutoring and teacher assistance
- Mathematical models and aids

BUSINESS
- Typing practice
- Typing school work

HOME ECONOMICS
- Foods laboratory
- Clothing laboratory
- Advanced project work

INDUSTRIAL ARTS
- Wood, plastics
- Power mechanics and metal
- Mechanical drawing
- Graphic Arts

SPEECH AND DRAMATIC ARTS
- Dramatics practice
- Public speaking practice
- Use of Little Theater stage

INSTRUMENTAL MUSIC
- Individual practice rooms
- Practice of solo and ensemble work
- Use of tape recorder for self-criticism
- Record player

SCIENCE
- Greenhouse
- Animal room
- Darkroom for photography
- Chemistry laboratories
- Biology laboratories
- Earth-Space laboratories
- Slides, filmstrips, 8mm film

VOCAL MUSIC
- Individual practice rooms
- Group rehearsal
- Piano and record players

READING CENTER
- Reading accelerators
- Programmed reading machines
- Tape recorder for spelling and reading
- Individualized reading materials

ART
- Illustrated lectures
- Craft center with kiln
- Individual art projects in art rooms

PHYSICAL EDUCATION
- Apparatus gym
- Remedial gym
- Dance studio
- Main gymnasium

GUIDANCE COUNSELOR OFFICES
- Individual conferences
- College and career information

HEALTH SUITE
- Individual conferences

EXHIBIT 6

ABINGTON HIGH SCHOOL
NORTH CAMPUS
Abington, Pennsylvania

MEMO TO: All Faculty

FROM: Allan A. Glatthorn

DATE: November 19, 1965

SUBJECT: Independent Study Projects

We think we are ready to begin the next phase of independent study at North Campus. We would like to use this rather lengthy memo to give you the full picture of where we are and where we want to go. We figure that asking you to read a long memo is better than asking you to sit through a long faculty meeting.

WHAT'S THE NEXT BIG PUSH? (You know there's always a "next big push" at North Campus.) Independent study projects developed by responsible students and guided by teachers.

Let's first define each of these terms:

1. Independent Study Major Work Project

   a. For our purposes, it is not a library paper, although these have their place, and some background reading may be necessary.
   b. It is a purely voluntary undertaking; teachers may require class projects, but for this discussion we are eliminating the required project.
   c. It requires some original work: the emphasis is on creativity, originality, primary sources.
   d. It requires work in depth. While it may not necessarily be of extremely long duration, it will not be superficial in its approach.
   e. It focuses on a well-defined problem, sufficiently limited in scope to result in some meaningful work.
   f. It may be in any area of endeavor and is not limited to the academic. Some examples might be helpful:

      1. Write a history of your local church, using original documents and personal interviews.
      2. Write a visitor's guide to Abington Township, stressing historical places in the township.
      3. Design and build a bookcase-desk combination.
      4. Write a series of original folk songs which you think will express the concerns of students your age.
      5. Design and make a more attractive yet functional garment which could be worn by girls while taking physical education.

2. Developed by Responsible Students

   We think we have about ten percent of the student body who are ready to undertake such independent, creative work in depth. They necessarily are not the brightest students. They probably have the following characteristics:

   a. Either they have a strong interest in a special subject, or a latent interest that might be stimulated.

EXHIBIT 6 (cont.)

MEMO TO: All Faculty
SUBJECT: Independent Study Projects
November 19, 1965

b. They are self-starters. They have initiative and can get moving without too much pushing.
c. They are highly self-directed. They can see the next step and take it.
d. They can stick to a job and get it finished.
e. They can be trusted to work without close supervision.
f. They can handle the extra load of a project without being hurt academically or emotionally.

3. Guided by Teachers

Even though we do a good job identifying students, with all these meritorious qualities, they will still need close supervision. The teacher independent study adviser will have to stimulate interest, assist in defining the problem, provide or direct the student to resources in school or community, check frequently on progress, help in any evaluation. Because of the importance of the job and the demands placed upon the adviser, we do not think a teacher should undertake to advise more than two students on an independent study major work project. We are therefore looking for teachers who:

a. Are convinced of the value of the major work program.
b. Have the time available to take on one or two advisees. (unfortunately, our ranks in the commons are so thin that we cannot reward these people by reduced commons assignments.)
c. Have special interests in fields that lend themselves to independent study. (Does not necessarily have to be a subject field.)
d. Work well with students on a one-to-one basis.

WE SHOULD LIKE TO MAKE IT VERY CLEAR THAT TEACHER PARTICIPATION AS ADVISERS IS PURELY VOLUNTARY; WE WOULD GIVE TEACHERS OUR SOLEMN ASSURANCE THAT A TEACHER'S FAILURE TO PARTICIPATE WOULD NOT BE HELD AGAINST HIM IN THE YEARLY EVALUATION PROCESS.

Now, after all this, HOW CAN YOU HELP?

1. Help us identify students who can handle independent study major work projects; they do not have to work in your subject specialty or be in your class. They may, for example, be in a club you sponsor.

2. Help us identify students who already have done something significant in independent study which they can share with fellow students. (There may be some overlap here; a student may fall in both categories--or in one but not the other.)

3. Identify your own readiness to participate.

Exhibit 6

ABINGTON HIGH SCHOOL
North Campus
Abington, Pennsylvania

FACULTY RESOURCES for INDEPENDENT STUDY MAJOR WORK PROJECTS - January, 1966

Name of Adviser	Department	Fields of Interest
Mrs. McJunkin	English	Composition, Creative Writing, Research related to literature and the other arts
Mrs. H. Ferree	Biology	Assist along any line
Mr. John Mirsch	Mathematics	Mathematics of Aerial Photogrammetry
Miss R. Wolf	Guidance	English type project
Mr. Richard Keiser	Mathematics	House design and construction
Mr. C. Tremer	Social Studies	Archeology (classic or local) Anthropology (any phase of culture, prehistoric man, linguistics, etc.)
Mr. J. Procino	Language	Spanish and Spanish-American literature and culture
Mr. F. Mayer	Science	Electronics
Mrs. J. Silverman	English	Drama-Study or production of play
Mrs. E. Frey	Mathematics	Mathematics
Mr. R. Schell	Social Studies	Human Relations Topics World Affairs Research Study of World Religions
Mrs. Lenner	Science	Science
Mr. Wm. Pacropis	Mathematics	Assist along any line
Mr. W. Miller	Physical Education	Physical Education
Mr. J. Metzgar	Physical Education	Physical Education
Mr. A. Quay	Guidance	Consult beforehand
Mr. J. Stanley Quinn	Speech and Drama	Speech and Drama
Mr. W. Grun	Industrial Arts	Industrial Arts Shop
Mr. L. Awad	Music	Instrumental Music

Exhibit 6
(cont'd.)

Name of Adviser	Department	Fields of Interest
Mrs. D. Goluboff	Social Studies	Any area in the Middle Ages or Social Problems
Mrs. Sudlow	English	Preparing an oral report on a topic related to English studies
Mr. L. Jones	English	Term papers - Photographic Essay
Mr. M. Hughes	English	Slide-Tape Dramatizations, etc. Creative Writing
Mr. M. Waters	Special Education	any field in which I am able to assist
Mr. B. Gleim	English	English history
Mr. A. Favrod	Language	French culture, literature
Mr. L. Rinker	Science	Biology - in fields qualified
Mr. Oeste	Science	Geology - work in the field, plus research and reading about some limited area nearby Choral Music and Directing
Miss E. Hamilton	Social Studies	Religion in History
Mr. Wm. Miller	Mathematics	Mathematics
Mrs. B. Friedman	Social Studies	Social Studies History - political
Mrs. L. Martin	Art	Ceramics - Oils
Miss S. Goodman	Science	Chemistry
Mr. P. Humber	Mathematics	Modula Arithmetic Fields, Groups Graphs, etc.
Mr. E. Wilk	Language	German - French
Mrs. C. Perfecky	Language	Russian - French
Miss E. Chew	Language	French - creative writing, reading, discussion, research and display
Mr. D. Baker	Social Studies	Community Project

Exhibit 6
(cont'd.)

Name of Adviser	Department	Fields of Interest
Mrs. G. Trusal	Home Economics	Any Home Economics area
Mrs. C. Keppel	Home Economics	Any Home Economics area
Mr. D. Turner	Science	Chemistry
Mr. H. Stewart	Science	All Sciences
Mr. D. Stiles	English	English
Mrs. L. Rau	Mathematics	Mathematics Projects Music (Creative writing in music) Projects in knitting
Miss P. Lynaugh	Mathematics	Mathematics
Dr. A. Glatthorn		Book of Job Mark Twain Primitive Mythology Negroes in American Society Writing Poetry and Short Story American Dialectology
Mr. J. Smith	English	Anthing in the humanities American Literature and History Modern poetry, 20th Century Philosophies, Drama
Mr. H. Gilmore	English	Any phase of English, Poetry, Novel, Mythology
Mr. J. McCaffery	Social Studies	Work with student interested in social problem - Contemporary Drama
Mrs. Butera	Language	Spanish - English
Miss D. Day	Language	Latin - Etymology Study Spanish-Literature
Mr. R. Bell	Science	Entomology Ferns
Mr. H. Bomberger	Earth Science	Earth Science
Mr. S. Shorb	Science	Earth Science - General Science

EXHIBIT 6 (cont.)

INDEPENDENT STUDY MAJOR WORK PROJECT

Teacher's name ________________________________

I. Teacher Availability (Check One)

_____ I am not available at the present time to act as an adviser.

_____ I am available to advise one or two students on an independent study major work project. I will be able to advise in the following field(s):

____

____

____

II. Responsible Students. I think the following students are able to carry out a major work project in terms of the criteria established:

____

____

____

____

III. Work in Progress. The following students have an independent study project under way or completed which they could talk about or display to fellow students:

____

____

____

____

____

____

EXHIBIT 7

REPORT OF INDEPENDENT STUDY

Name______________________________

Subject___________________________

Instructor________________________

* * * * * * * * * * * * * * * * * * * *

Time and Date:

Module______

Day_______________________________

Date______________________________

* * * * * * * * * * * * * * * * * * * *

Approved by_______________________

Exhibit 8

ABINGTON HIGH SCHOOL
NORTH CAMPUS
Abington, Pennsylvania

To the faculty:

We believe enough time has transpired to enable us to identify the non-achievers or those who are in serious trouble. The remedial clinics, to which students are assigned, proved last year to be an effective device in providing help for those who fall in this group. It is expected that teachers who are interested and successfull in signing up these clinics will be released from some commons duty. The procedure to be used in setting up these clinics is the same as last year, which is as follows:

1 - Those teachers interested would circulate among their classes the attached sign-up sheets - Form 1. On the sign-up sheet you would indicate for the students all the periods in which you are not teaching a class, listing both your free periods and your commons periods.

2 - On the basis of the number of student requests, you would tentatively set up possibly from 1 - 5 clinic periods per week. It is probably not feasible to organize any clinic period for fewer than three students.

3 - You would then submit to Dr. Ferderbar's office, the second form attached, "Study Clinic Proposals."

4 - On the basis of your requests and Dr. Ferderbar's supervisory needs, he would then attempt to make the necessary modifications in your commons assignments, whereever possible trying to release you from commons duty for a number of periods approximately equivalent to the number of clinic periods you wish to undertake.

5 - As soon as you receive a clearance from him, you are ready to go. Inform the students who have signed up for the periods for which you have established and for which you have received clearance.

6 - Keep all these sign-up sheets in your files. They may be useful in later parent conferences.

7.- You should keep in mind--and you should stress with the student that once he signs up for the independent study clinic, he makes a commitment to attend regularly until you release him from that commitment.

Allan A. Glatthorn

Exhibit 8
(cont'd.)

Form 1. Independent Study Clinic Sign-up Sheet

Teacher's name ______________________________

Periods available for clinic:

Monday ______________ Thursday ______________

Tuesday ______________ Friday ______________

Wednesday ______________

To the student: If you are interested in receiving additional help from the teacher listed above during one or more of your independent study periods, fill in the requested information below. Since your teacher is volunteering his released time to help you, you must agree to come regularly and promptly until such time as your teacher gives you permission to withdraw from the clinic. If you do not attend a scheduled clinic on a day when you are present in school, this will be treated as cutting. List below all the days and periods when you now have independent study, which match your teachers unassigned periods listed above. After the teacher has completed this survey and necessary schedule adjustments have been made for him, he will inform you when you are to attend.

Your Name	Periods when your Class meets	Your Independent Study Modules (E.g., Mon. 3,5,7,; Tues. 7,8, etc.)

Exhibit 8
(cont'd.)

Form 2. Proposal for Independent Study Clinic

Name of teacher ______________________________

I would like to organize the following clinics:

DAY	PERIOD	NUMBER OF STUDENTS AVAILABLE

I presently have the following commons assignments:

Monday ______________________________

Tuesday ______________________________

Wednesday______________________________

Thursday ______________________________

Friday ______________________________

ABINGTON HIGH SCHOOL
NORTH CAMPUS
Abington, Pennsylvania

Exhibit 9

February 11, 1966

To the parents:

In previous meetings and communications, we have stressed the many different opportunities available through independent study for developing special interests, practicing skills, and working on advanced projects. We think that this mid-year period is now a good time for school and parents to work together in helping students use independent study to improve basic academic skills. We at the school will be working during the next several weeks in expanding remedial clinics, providing additional staff for academic help, adding materials to study centers, and directing students in making better use of time. You can help at your end by taking the following steps:

1. Have the student complete the following chart for all his major academic subjects:

Subject	Average Grade for first two report periods	Number of required independent study periods for all	Number additional to be scheduled for academic improvement*	Total to be scheduled each week
English		2		
World Civilization		Varies		
Mathematics				
Science				
Foreign language		2		
Business		Varies		

*Note: If students received a D or F in a major subject for the second report period, we recommend a minimum of three independent study periods each week in a remedial clinic in addition to any required independent study.

2. Check the reverse side of this page to see when special remedial help is available in each major subject.

3. On the basis of the figures shown in the chart, have the student plan a study schedule for the week to come which will ensure that he gets the remedial help he needs, takes the basic independent study required, and still has the opportunity to take advantage of other independent study opportunities.

4. All students reporting to any of the clinics or centers for independent study can request the teacher on duty to sign an "Independent Study Attendance Form" which the students can show to parents who want to be sure that the student is following the schedule as planned.

5. If you find that your son or daughter cannot get the remedial help needed because of conflicts in schedule, you or the student should contact your guidance counselor. Special arrangements will be made to provide the help needed or additional remedial clinics will be set up.

Exhibit 9

We think that independent study has great potential for helping all students make significant strides academically. We feel, however, that this goal can be reached only if parents and school work together in this continuing effort. Students need constant, positive encouragement to utilize time and opportunity. These are critical years in terms of formulating habits of self-discipline and independence. Please let us know if you have any questions or suggestions for improvement.

INDEPENDENT STUDY REMEDIAL HELP AVAILABLE

CLINIC	DAY	MODULE
Composition	Tues.& Thurs.	1 - 7
English	Mon. - Fri.	8 - 17
Social Studies	Mon. - Fri.	8 - 17
Mathematics	Mon. - Fri.	8 - 17
Earth & Space Sci.	Mon. & Thurs.	16 & 17
Biology	Wednesday	11 & 12
	Thursday	1 & 2
Biology BSCS	Monday	16 & 17
	Thursday	13 - 17
Chemistry	Monday	6 & 7
	Tuesday	4,16,17
	Wednesday	6
	Thursday	6,16,17
	Friday	1 & 2
Business	Monday	5,6,13 14,15
	Tuesday	9,10 14,15
	Wednesday	9,10,11
	Thursday	9,11, 12,16
	Friday	9,10,13 14,15
Language Labs	Mon. - Fri.	1 - 17

CLINIC	DAY	MODULE
Spanish I	Monday	16
	Tuesday	14 & 15
	Wednesday	12,15,16
	Friday	7,13,14 15,16
Spanish II	Monday	12,14,15
	Tuesday	8,14,16
	Wednesday	15 & 16
	Thursday	6,8,9,16
	Friday	12,14,
French I	Monday	16 & 17
French II	Monday	13,15, 16,17
	Tuesday	7, 16
	Wednesday	8,9,10 12,13,16
	Thursday	6,11,12 13,14,15
	Friday	16
French III	Monday	14,16,17
	Thursday	15
	Friday	13
German I	Thursday	15
German II	Monday	4
	Tuesday	6

- -

A Final Reminder:

Remedial instruction during independent study is intended to supplement regular classroom work for students who can profit from such added work; attending remedial clinics does not excuse a student from doing regular assignments or keeping himself well prepared for the classroom. Neither, of course, does it guarantee that the student's grades will improve.

EXHIBIT 10

HUMANITIES-SCIENCE SEMINAR

Suggestions for Projects

1. Administer a carefully devised questionnaire to a selected sample of 200 students, being sure to balance such variables as race, sex, creed, age; survey their attitudes about questions of religious belief. Compare your findings with those of professional pollsters and draw whatever conclusions you can about the religious beliefs of teen-agers.

2. Survey students at North Campus as to what school rule they would like most to have changed. Survey twenty other selected schools as to how they handle a similar problem. Survey our faculty and administration on their attitudes. Draw up a proposal which you can present to student council and administration on the basis of your study.

3. Make a study of war songs which were popular during all of the major wars in which our country has been engaged--from the Revolution to the Korean war. What conclusions can you draw about changing styles in war songs? Write the lyrics to a song which you think would be appropriate to the present conflict in Vietnam.

4. Write and produce a radio script entitled "On the Nature of the Good Life." Select readings from the great spiritual leaders and philosophers of the present and past. Write narrative bridges between these passages and record appropriate musical background. Record on tape for later presentation.

5. Make an 8mm sound movie illustrating a consistent theme. Select a subject which can be handled in a relatively short segment--film is expensive. This project would require extremely careful preparatory planning.

6. Study the lyrics of the 50 most popular recordings of the past year. What do these lyrics reflect about our culture and our times? Write your own lyrics which you think have the same ingredients of the popular songs.

7. Make a study of "war in art." Prepare a program which you can present to a large group which will include slides and prints in an attempt to show how artists over the centuries have felt about war.

8. Make an historical study of American automotive design for the past 30 years. What does our taste in cars reveal about us? Predict what design changes will take place in the next ten years and design the car for 1975.

EXHIBIT 10 (cont.)

9. Study the religious beliefs of representative scientists from the mid-19th century to the present time. Examine what each has thought about such basic issues as free will, the nature of creation, the purpose of life, the nature of good and evil. Consult personally or through correspondence with scientist of the present. Draw some tentative conclusions about the changing patterns of religious beliefs of scientists.

10. Study the historical development of the justice of peace as a local administrator of justice. Read what contemporary authorities have said about the pros and cons of the JP system. Interview selected JPs from the surrounding area. Correspond with judges in the higher courts. Draw some tentative conclusions about the strengths and weaknesses of the JP system and make some recommendations for its improvement.

11. Make a careful analysis of the hymns contained in the hymnal of your church or synagogue from two standpoints: the literary and the theological. Draw some tentative conclusions about tendencies and patterns you think are evident. Attempt to write your own words to a familiar hymn tune.

12. Trace the development of the sports hero, from the time of the Greek olympics to the present day. Talk with local professional athletes. Draw some tentative conclusions about the changing nature of the sports hero and what this reflects about our own times.

13. Read Albert Camus' notebooks and write a paper which discusses how his notebook entries clarify his philosophy and relate to his literary works.

14. Study purification rituals in several primitive cultures. What similarities and differences do you find? What ritualistic remnants do you find in our own culture?

15. By using primary sources--interviews, minute books, original documents, local materials--write a history of your community church or synagogue.

16. Develop a questionnaire which you think will measure the religious beliefs of those who attend your church or synagogue. Check with your clergyman as to its form, content, and the mechanics of administering it. Analyze your findings and draw whatever conclusions you can.

17. Prepare a tourist's guide to Abington Township. Illustrate it with maps and photographs.

18. Make a 35mm slide program of your community or school. Write a script which could be used in presenting it.

EXHIBIT 10 (cont.)

19. Prepare a visitor's guide to North Campus taking him through a typical day in the life of a student. Illustrate it with maps and photographs.

20. Do a paper on "The Abington Bible Reading Suit--The Human Side of an Historic Decision." Talk personally with those immediately involved in the suit.

21. Take any short story which we have read, or one not read in class, which interests you and turn it into a radio script. Tape record your script with the appropriate musical and sound effects.

22. Study magazine advertisements from three decades: 1920, 1940, and 1960. What do they reveal about changing taste and mores? Draw up a series of ads for a product you select which you think would appeal to teen-agers.

23. Create, select, and arrange a series of paintings and photographs in an essay format to reveal the effects of the machine in American culture.

24. Develop a project entitled, "Improving the Abington Community." Talk with civic planners, local civic leaders; read what other communities have done. Draw up a blueprint for improving your own community.

25. If our school ever needed to add more space, what kinds of facilities and what new ideas should be incorporated into the planning. Draw up some sketches illustrating your ideas.

26. Take a recording of classical or contemporary music and create your own dance for it. Combine your dance with a reading of selected poems either by yourself or with another student.

27. Study the history of protest movements and minority opinions in America. Attempt to draw some tentative conclusions about the people involved and the times in which various movements occurred. If possible, make comparisons or contrasts with current events.

EXHIBIT 11

GUIDE FOR DISCUSSION LEADERS ON INDEPENDENT STUDY

1. If students were not allowed to talk in Commons A, would student discipline in general throughout the school get better or worse?
2. Should students be allowed in Commons A as a "talking commons" only if they have passed all major subjects on the previous report?
3. Are there any other suggestions you have for improving Commons A?
4. Based on our present 17-module day (85 modules a week), what do you think is the ideal number of modules the average 9th grader should have for independent study every week?
5. What do you think are the main advantages of independent study from the student's point of view?
6. How would you improve the various departmental study centers?
7. Do you think we have enough remedial clinics, and are you getting enough help in them? Are there any areas where more remedial clinics are needed?
8. What suggestions do you have for improving the library and its operation?
9. Are there any other kinds of study centers which you would like to see opened up?
10. What is the best way that we can reward and recognize students who have done a good job on independent study--points, grades, awards, displays?
11. Do you think that many 9th graders could handle a major independent study project that would require original work, would last for several weeks, and which might require some work outside of school?
12. Do you have any general suggestions for improving independent study?

Exhibit 12

INDEPENDENT STUDY QUESTIONNAIRE

Grade ________ Boy ________ Girl ________ Have you received one or more failure warning notices so far this year? Yes ____
No ____

1. Count up how many "Free" mods you have each week then encircle the range in which that number falls.

Between 11 - 15	Between 16 - 20	Between 21 - 25	Between 26 - 30

2. Do you think you have just enough independent study time, not enough, or too much?

_____just enough _____not enough _____too much

3. How much "Free" time do you spend in each area? Encircle the number of mods that show best how you spent your time last week.

English Center	1-2	3-4	5-6	Reading Center	1-2	3-4	5-6
Social Studies	1-2	3-4	5-6	Phy.Ed. Centers	1-2	3-4	5-6
Math Clinic	1-2	3-4	5-6	Music Centers	1-2	3-4	5-6
Science Clinics	1-2	3-4	5-6	Art Centers	1-2	3-4	5-6
For.Lang.Centers	1-2	3-4	5-6	Home Ec.Clinics	1-2	3-4	5-6
Business Centers	1-2	3-4	5-6	Ind.Arts Centers	1-2	3-4	5-6

Library	1-3	4-6	7-9	10-12
Commons A	1-3	4-6	7-9	10-12
Commons B	1-3	4-6	7-9	10-12
Commons C	1-3	4-6	7-9	10-12

4. As centers are being furnished with more materials and equipment, we need to know which are being used. Put a check beside each item you used last week.

Tape recorder ____
Record Player ____
Movie Proj. ____
Books ____
Records ____
Magazines ____

Cartridge Proj. ____
Film strip view. ____
Slide Projector ____
Newspapers ____
Filmstrips ____

Typewriter ____
Reading accel. ____
Microscope ____
Programed texts ____
Tapes ____

5. If you had the time, help, and were interested in a project, which kinds would appeal to you most?

Write research papers ____
Perform lab experiments ____
Build a model ____
Create an original work of art ____
Perform field work ____
Construct electronic equipment ____

Conduct community research survey ____
Collect materials or specimens ____
Write an original play ____
Design a house plan ____
Keep a progress chart ____
Make a chest of drawers ____

Other ____

____

____

(Describe)